IN THE

Enited States Circuit Court of Appeals

FOR THE MINTH CIRCUIT.

ILASKA TPEADWELL BOID MINING COMPANY: Corporate:

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ALASSA MEXICAN COLD MINING COMPANY, a Conposition; man

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ALASKA TREADWELL GOLD MINING COM-PANY, a Corporation;

ALASKA UNITED GOLD MINING COM-PANY, a Corporation;

ALASKA MEXICAN GOLD MINING COM-PANY, a Corporation; and

ROBERT A. KINZIE,

Appellants,

VS.

ALASKA GASTINEAU MINING COMPANY, a Corporation,

Appellee.

REPLY BRIEF OF APPELLANTS.

In view of the fact that the statement of facts of appellee's counsel, as well as the introductory remarks contained in the brief, contain many statements that are misleading, and so worded that if left unexplained, they would leave a wrong impression concerning the

real facts in the case, it becomes necessary to refer to at least some of these statements.

At the outset on page 1 of the brief the statement is made that Mr. Bradley entered into a contract, referring to the contract of October, 1909, with the predecessor in interest to the appellee, and that the object and purpose of this contract was that of adding value to the Sheep Creek mines. That this was the object of the contract as far as the predecessor of the appellee is concerned, cannot be doubted, but the object of Mr. Bradley, on the other hand, was that of procuring power for use in connection with the operation of the Treadwell mines, owned by the appellant companies. Attention is called to the purpose Mr. Bradley had in view, for the reason that it is important in connection with subsequent discussion.

On page 2 it is stated that while this contract was of record, one Jackling, whom it is stated is a mining engineer of wide experience, was attracted to the property and planned an expenditure of \$4,500,000 upon it. Counsel then proceed to say that the Sheep Creek mines and the contract in question were purchased by Mr. Jackling in reliance upon the fact that the appellants would keep the contract, to which is added the statement that in the community in question there was no other available power nor were there other producers from whom power could be obtained.

It would appear from this statement, as it occurs

on page 2, that Mr. Jackling, a mining engineer of wide experience, arranged to expend \$4,500,000 to develop a mine so that in two and one-half years 6,000 tons of ore per day would be mined and milled. It must be understood that such a mill would be somewhat larger than all the Treadwell mills combined. Yet this is the capacity that appellee's mill is to have, according to the statement of counsel on page 2 of the brief. And it is asserted that this engineer of wide experience entered upon this undertaking by purchasing a contract by which he would be entitled to receive a current of not to exceed 300 horse power, with no other available power, at a place where there were no other producers from whom power could be obtained.

That such a plant would require several thousand horse power in connection with its operation, goes without saying, and it follows that the statement that Mr. Jackling relied upon this current of not to exceed 300 horse power to operate this immense plant is entirely erroneous and without any foundation in fact.

Then follows the statement on page 3 that after the appellee had once started to work, appellants placed a construction upon the contract of October, 1909, which would have resulted in delaying the program of the appellee almost indefinitely, and that since Christmas, 1912, the appellee was completely deprived of all power under the contract.

Now, the fact is that the appellants placed upon the contract in question the only construction of which that contract admits, as we have already shown in our brief, and hope to further demonstrate here. The statement that the effect of that construction would in any wise interfere with the operations of the appellee is as erroneous as the statement that Mr. Jackling expected to operate a 6,000 ton milling plant with 300 horse power.

The question of whether the appellee shall be entitled to sufficient current to enable it to develop 300 horse power by whatever machinery it may see fit to install, at whatever place it may desire to install it, or shall be entitled to a current from which it can develop 300 mechanical horse power if adequate machinery is installed, and such machinery is operated with a reasonable degree of skill, can in no wise affect the operations of the appellee, except that in the latter case it will be required to go to the additional expense of installing adequate machinery and employing men possessed of a reasonable degree of skill to operate it, for if this is done, the current furnished by appellants will yield the appellee 300 horse power, and that is all it is entitled to in any event. Nor can the appellee's operations be affected by the question of whether or not they shall be entitled to starting surges or starting currents, except that if the court should hold that they are not entitled—under the contract—to starting

surges or currents, they will be obliged in order to utilize the full 300 horse power, to either remove their load when the motor is started, employ smaller motors so that one at a time can be started, or supply the larger motor with suitable starting devices so that it can be started under full load conditions without requiring additional current. Surely, the operations of the appellee would not be indefinitely delayed if it were required to supply these motors with starting devices which, as we will endeavor later on to show, are entirely practical and are in general use. With the appellee it is not a question of whether it will be deprived of power, but whether it will become necessary for it to use efficient machinery operated with reasonable skill in order to develop from the current that is furnished the 300 horse power to which it is entitled, or whether it will be permitted to use the wasteful, slothful methods now employed at the expense of the appellants.

Counsel then proceeds to state that the matter in dispute is so trifling that it should have been settled out of court. That the matter in dispute is trifling to appellees is quite true, for the construction placed upon the contract by the trial Court and for which the appellee contends gives it no advantage whatsoever, except that it is enabled to use cheap and inefficient machinery, carelessly operated, without any loss to itself, while it would be required, if the

construction contended for by appellees were adopted, to employ efficient machinery, keep it in good repair and operate it with a reasonable degree of skill in order that it might be able to develop 300 horse power from the current furnished it under the contract. The saving that would thus result to the appellee from the use of inefficient machinery and slipshod method of operation, is the only advantage that could fall to it as a result of the lower Court's decree.

In the case of the appellants, however, the situation is very different. To them the affirmance of the decree of the lower Court sustaining the contention of the appellee means the loss of their entire Sheep Creek investment for all practical purposes, for if the appellee is to have the right first of all to distort the current generated in the Sheep Creek plant and thereby waste its efficiency without restriction either by using motors that would bring about that result, or by using long transmission wires or other apparatus having like effect, the Sheep Creek generating plant loses its value to the appellants not only because the appellee may take the entire current generated, but even if it does not take the entire current, the appellants are in no position to know when it will require the entire current so that they cannot depend upon the Sheep Creek plant for power in connection with their operations, but are obliged to make other provisions so that if at any time the appellee shall require

all the current generated, they will not have to shut down their mines for lack of power. And again, that portion of the decree which directs the appellants to furnish starting currents whenever required is equally ruinous to appellants for while these currents may not be drawn with great frequency and may be of short duration, the appellants must always hold in reserve sufficient current to meet these momentary demands whenever made, for they have no way of knowing in advance when these excessive demands will be made, and must, therefore, be in readiness at all times to meet them. This makes it necessary to keep in reserve a current approximately five times as large as the running current of the appellee's motor, that is to say a current of approximately 1500 horse power, assuming the running current to be 300 horse power, which current appellants must permit idly to circulate in the circuit where it is of no benefit to anyone except at short intervals when the appellee starts his motor, and all this in order to save the appellee from the necessity of supplying itself with ordinary starting devices or the necessity of removing its load at the time of starting. If the appellee were permitted to draw sufficient current to enable it to develop 300 horse power with the motor which it is now operating at a power factor of approximately 60 per cent. so that it requires a current in excess of 500 horse power to develop 300 mechanical horse power, the appellants would be deprived of any use of the Sheep Creek plant even though there should be water enough in Sheep Creek to operate the plant to capacity, for if the starting current of the motor is five times as great as its running current, a motor that would require a current of 500 horse power to generate 300 mechanical horse power would require a starting current of five times 500, or 2500 horse power, whereas the total capacity of the Sheep Creek plant is only 2600 horse power.

If this decree and the construction contended for by the appellee is sustained, the appellants would, therefore, have to permit all the current that can be generated at the Sheep Creek plant to circulate idly in the circuit and remain there in order that it might be there to meet such occasional demands as the appellee might make for it to start its machinery. Surely the matters involved in this litigation are not trifling as far as appellants are concerned, however slight the advantage that the appellee can gain from a decision one way or the other.

We now come to the counsel of the appellee's statement of the case commencing on page 4 of their brief. This statement refers in a large part to matters that are wholly immaterial, and we refer to it only in order that the Court may not receive an erroneous impression regarding the conduct and attitude of the

appellants in connection with the subject matter before the Court. The statement contains many inaccuracies. Some of these we will endeavor to correct.

At the outset of the statement it is said that the appellee's predecessor was at the time of the execution of the contract in possession of the Sheep Creek mines and the Sheep Creek water right, and that 260 actual horse power were required to operate the Sheep Creek mine. The matter of the power requirements of the Sheep Creek mines has already been discussed in our original brief on file at page 157 et seq., where it was shown that 150 horse power was all that the mines actually required. Mr. Bradley testified in detail as to just what the power requirements of the Sheep Creek mine at that time having 30 stamps would be (See evidence Bradley, Record, page 670), and in this he is corroborated by Mr. Kinzie and others. Nor is there any substantial dispute upon this question. Mr. Thane, the general manager of the appellee, issued a prospectus, which is in the record, in which it was estimated that 300 electric horse power referred to in the contract of October, 1909, was sufficient to operate the 100 stamp mill at the Perseverance and drive the Sheep Creek tunnel besides. Surely, if 300 horse power can do all this, 150 horse power would be amply sufficient to operate the Sheep Creek mine, having but 30 light stamps (See Prospectus, Record, page 718; also Deposition Bradley, p. 672). But the conclusion of the Court and counsel that 260 actual horse power was necessary to operate the Sheep Creek mines is not based upon the actual power requirements of the mines, but upon the power requirements of the various pieces of machinery situated in and about the mine at the time, which included compressors and other apparatus transferred and conveyed to the appellants under and by virtue of this particular contract, the contract of October, 1909. Mr. Bradley testified that much of this machinery was unnecessary to the successful operation of the mines (see evidence Bradley, Record, page 670) and surely the other parties must have taken the same view of the situation, for had they not done so, they would not have transferred their compressor and other apparatus, and by so doing rob the mine of necessary appliances. In any event, it could not have been the intention of the parties to reserve a current for the purpose of operating these machines, for the machines themselves were transferred to the appellants, one of them, a compressor, as stated by counsel for appellee in their brief on page 5, being now in use by the Alaska Juneau Company at the Gold Creek tunnel. Clearly, this compressor and the other apparatus conveyed to appellants was useless and unnecessary in connection with the operation of the Sheep Creek mines, and did not and cannot enter into any calculation of the power requirements of these mines, which in no event exceeded

150 horse power as was clearly shown and is as stated by Mr. Bradley in his letter to Mr. Endicott.

On page 6 of the appellee's brief occurs a statement that at the time the contract was made, the appellee also had other mines beside the Sheep Creek mines, and this is followed by the statement that Mr. Bradley represented to the attorney for the appellee that he was desirous of securing control of the Sheep Creek water power and would in consideration therefor furnish the appellee's predecessor with sufficient power to operate its mine from a power plant to be constructed by Mr. Bradley.

This statement is altogether erroneous, if considered as a whole. There is nothing in the record or in the findings to show that Mr. Bradley ever made the statement that he would furnish or reserve sufficient power to the predecessor of the appellee to operate its mines. The statement of Mr. Bradley was to the effect that all the power the Sheep Creek mines had ever required in the past or would require in the future was 150 horse power, and that he would furnish a current of not to exceed 200 horse power in order to supply the appellee's predecessor with ample power to operate the Sheep Creek mine.

(See letter of Bradley to Endicott, Record, page 652.)
(See evidence Shackleford, Record, page 103.)
(See evidence Bradley, Record, page 652.)

At no time was it contemplated by anyone in con-

nection with the execution of the contract that power was to be reserved to operate any mines other than the Sheep Creek mines.

Counsel then proceed to state on page 6 of the brief that Mr. Bradley made the statement to Mr. Shackleford, the attorney for the appellee's predecessor, that the Sheep Creek power plant had a producing capacity of 150 horse power, but that 200 horse power would be ample with which to operate the Sheep Creek mines and would make "good measure." Now, the statement of Mr. Bradley was to the effect that 150 horse power was all that the Sheep Creek mines would require, and was ample to operate these mines, and that 200 horse power would make good measure.

(See evidence Shackleford, Record, page 103.) (See letter Bradley to Endicott, Record, page 652.)

Counsel then proceeds to state that Mr. Bradley was misinformed upon this subject, since the water power plant had a capacity of 380 horse power and that the power requirements of the mine were 260 horse power. Mr. Bradley, however, testified that he did not take into consideration the capacity of the water power plant nor the power requirements of the various pieces of machinery on the ground, but that he estimated the amount of power necessary to the operation of a mine at 150 horse power, that being the amount of power that would be necessary to operate

30 stamps if properly operated, and that he made an allowance of 50 horse power to take care of such things as power factor losses and other matters of that kind.

(See evidence Bradley, Record, page 668.)

Counsel then state that a draft of an agreement was drawn by Mr. Bradley and Mr. Shackleford, which was identical with the agreement of October, 1909, with the exception that the word 200 electric horse power appeared wherever 300 electric horse power appeared in that agreement. It is then stated that this agreement, together with a letter from Mr. Bradley to Mr. Endicott, set out at length in the brief, was presented to Mr. Endicott, and that thereupon a consultation was had with Mr. B. L. Thane, who, it will be observed, is the general manager for the appellee, in regard to the power needed for the operation of the Sheep Creek mines exclusive of any starting surges.

The record shows that such consultation was had with Thane, but it also shows that the matter of starting surges was never mentioned.

(See evidence Shackleford, Record, page 111.) (See finding of the Court, Record, page 1059.)

Counsel then state that it was determined by the Boston owners that they would need 300 horse power instead of 200. The record shows that Mr. Thane advised the Boston owners of the fact that 300 horse

power would be required, and in this connection it must be remembered that Mr. Thane was acting as an expert in the employ of the appellee's predecessor, and was consulted by the appellee's predecessor with a view to determining just what would be required. The parties were dealing at arm's length. The appellee's predecessor did not rely upon anything that Mr. Bradley said, either by letter or otherwise, but consulted their own engineer and acted upon his advice, and upon being advised that 300 horse power would be required to operate the Sheep Creek mines instead of 200, Mr. Endicott wired Mr. Bradley that the contract would be executed if 300 were substituted wherever 200 appeared, and in this Mr. Bradley assented by wire. This led to the execution of the contract between the parties. The contract of October, 1909, was then set up at length in the brief presented by appellee's counsel. After setting up the contract at length, the following statement taken from the Court's findings occurs on page 13 of the brief:

"From the surrounding circumstances and from the face of the contract, it was the intention of the appellants to provide, and for the predecessor in interest of the appellee to receive, the beneficial and uninterrupted use of 300 actual horse power, including such starting surges and other conditions as would reasonably insure to the Oxford Mining Company, and its successors, the right to use 300 actual horse power, in connection with the ordinary machinery used in mining, and the ordinary forms

of induction motors in common use in mining on loads of 300 horse power or less."

This quotation is not accurate. The actual language of the Court was that it found from the surrounding circumstances that it was the intention of the parties, and so forth. The finding of the Court does not state that it is found from the surrounding circumstances and from the face of the contract. The phrase "from the face of the contract" does not occur in the Court findings. The Court simply finds from the surrounding circumstances independent of the contract that it was the intention that the appellee should receive 300 actual horse power, together with such starting surges as it might require. What these surrounding circumstances were upon which the Court based its finding cannot be surmised for no circumstances that would even tend to indicate that the parties had any such intention were proven in the case. In finding number 7, on page 1061 of the record, the Court finds that the matter of starting surges was never discussed by the parties to the contract. The language used by the Court is as follows: "Which matter of surges was not discussed between the parties to the contract." This finding is in accord with the evidence of the witness Shackleford upon this subject.

Now, the contract expressly provides that the current to be furnished was to be a current of not to

exceed 300 electric horse power. The contract between the parties, therefore, which is presumed to express their intention, expressly provides that the current to be furnished shall not exceed 300 electric horse power, which expressly precludes the idea that starting surges or currents were to be furnished for the reason that these currents did exceed 300 electric horse power, and since the matter of starting surges or currents was never discussed by the parties, and that nothing was said about the matter, it is very difficult indeed to conceive of anything upon which the Court could base its finding that the parties did intend to furnish such starting currents. Surely, the Court cannot gather the intention of the parties from any source except either their spoken or written word.

With reference to the balance of the finding that it was the intention that 300 actual horse power should be furnished, the situation is very much the same. The contract expressly provides that the thing to be furnished is current and not power. Under the contract, the matter of developing the current into power is left entirely to the appellee's predecessor in interest, the Oxford Company, and the matter of how much power it will get from the current furnished is left to depend entirely upon the manner in which the current is developed into power. Nor was there a single word of testimony to indicate that any of the contracting parties ever made any statements to the contrary. The matter was not referred to by any of the parties in any

of the conversations or communications had. Nowhere was it stated by anyone that the thing to be furnished was power, either actual or otherwise. Nor were there any statements made that would indicate that it was the intention of the parties that the quantity of current furnished was to be such as to enable the appellee's predecessor to develop 300 actual horse power by the use of such machinery as it might adopt, operated in such a manner as it might see fit. This matter, like the matter of starting surges, was never discussed by the parties. There is not a word of evidence in the record upon it. Mr. Bradley did state in his letter to Mr. Endicott that he considered 150 horse power ample to operate the Sheep Creek mine, but he did not state that the current to be furnished was to be whatever the Oxford Company might choose to make it so long as it did not develop in excess of 150 horse power from it. On the contrary, his proposition was to furnish 200 horse power, 50 horse power in addition to the actual requirements of the mine, the evident purpose of which was to take care of power factor losses and such other losses as might be incident to the operation of the mine, as well as to furnish ample margin which might be used for the starting of such small motors as the mine would require, even though such motors were not supplied with any starting devices. All the testimony in the case precludes the idea that the parties agreed to furnish or receive 300 actual horse power, that is to say, that much developed power, and there is nothing in the case, not a word of testimony from either side to indicate that the contract does not express the real intention of the parties. That is to say, that the thing to be furnished was a current to be measured by the unit electric horse power, and that the question of how much actual horse power would be developed from this current, whether 300 or something less, was left entirely to the Oxford Company, by which the current was to be developed into actual or mechanical power. Again, the Court finds in that same connection that it was the intention of the parties that the current should be developed by means of inducion motors, yet nowhere in the evidence is there a single word of testimony to the effect that any of the parties during any of the negotiations carried on, ever mentioned or referred to the use of any kind of motor whatsoever, or in any wise discussed the matter of how the current was to be developed into power, just as in the cases just previously mentioned this matter was not discussed at all. None of the parties ever mentioned it and the contract itself is wholly silent upon the subject. Nor is there any reason why the parties should discuss this matter, for if the thing to be furnished was current. and there can be no dispute upon that subject, which was to be developed by the Oxford Company, the question of how this current was to be developed was a matter in which the Oxford Company alone was concerned. It did not concern Mr. Bradley, and there is no reason why it should ever be discussed or mentioned by the parties. At any rate, there is nothing in the evidence to show that it ever was discussed and the finding of the Court in regard to the other matters just discussed has nothing to support it.

Again, on page 14, counsel adopts the portion of the Court's findings in connection with their statement of facts. According to this finding, the Court finds that for loads of 300 horse power or less, induction motors having inherent phase displacement and a power factor of less than unity, were in ordinary and practical use in mining, and that for that reason the appellants contemplated the use of such motors at the time the contract was executed. evidence upon this subject is this, that at the time the contract was executed, there were no motors in use in the district in connection with mining operations either of the induction type or any type (See evidence Kinzie, Record, page 516). Upon this question there is no dispute in the evidence. The first motors that were installed in connection with mining operations in the district were installed by the appellants after the construction of the Sheep Creek plant and at the present time there are but three motors in use in the district in connection with mining outside of the motors used by appellants, and these three motors are the motors owned by the appellee and the Alaska Juneau Mining Company (See evidence Kinzie, Record, page 515).

This matter also is not disputed in the evidence. The evidence of such men as Professor Cory, professor of electrical engineering at the University of California, Mr. Davis, engineer in charge of the business of the General Electric Company of San Francisco, Mr. Heise, the engineer in charge of the business of the Westinghouse Electric Company of San Francisco, Mr. Quinn, the engineer in charge of the Allis-Chalmers Company in San Francisco, and Mr. Hunt, an engineer located at San Francisco, and others that testified at the trial, was to the effect that both motors of the induction type and synchronous motors now are and for a long time past have been in general use in mining, although it is probably true that where small motors are required motors of the induction type outnumber synchronous motors. But both were in general use, and since no one said anything about motors of any type at the time the contract was executed, the matter never having been mentioned by any of the parties, the finding of the Court that the parties contemplated the use of any one motor or another, is wholly without any evidence or support. Nor would it be material in view of the fact that the matter of the development of the current is left entirely to the Oxford Company, who, of course, had a right to select their own motors. There was, therefore, no reason why the subject should be discussed by the parties.

The statement, quoting further from the Court's

finding, then proceeds that the power contract was for 300 actual horse power distinguished from 300 apparent horse power, and that the contract contemplated the beneficial use of 300 actual horse power as ordinarily spoken of and ordinarily measured by common and ordinary instruments for the measurement of horse power. It is hardly necessary to discuss this matter any further for the reason that counsel in their brief on page 54 expressly admit that the thing to be furnsihed was not power but current, and by that admission do away with this finding of the Court. Of course, if the thing to be furnished was current, then the thing to be measured was current, and current cannot be measured by instruments either ordinary or otherwise that are designed to measure power, but must be measured by those instruments which are designed to measure current. Counsel then refer to the testimony of Mr. Kinzie, general superintendent of the appellant companies, to the effect that the appellant companies are at present using only motors of the induction type, although two motors of the synchronous type have been ordered to be installed later. Mr. Kinzie in his testimony expressly states why motors of the induction type are in use by the appellants. His testimony is that when their motors were installed they had a surplus of current, and that for that reason it was not highly important that all the current should be developed into power. That since

motors of the induction type were simpler and more easily operated, these motors were installed, but that since that time the power requirements of the Treadwell mines had increased so that it became necessary to develop all the current into power, and for that reason the motors of the induction type were now replaced by motors of the synchronous type (See evidence Kinzie, Record, page 516). It is difficult to conceive how this testimony can be quoted as supporting the finding of the Court referred to. The counsel quote from the testimony of Mr. Davis, a part of his answer to cross interrogatory number four. They do not, however, quote the balance of his answer, which is as follows: "The General Electric manufactures standard synchronous motors of 250 and 150 horse power, but for various reasons the demand for these small synchronous motors is restricted." While the testimony of Mr. Davis, therefore, is to the effect that in small units more motors of the induction type are used than synchronous motors, it is also to the effect than synchronous motors are manufactured and in use. The answer of Mr. Davis to cross interrogatory number three, page 862, is to the effect that in the smaller sizes induction motors are more generally used, while in the larger sizes synchronous motors are more generally used. But whether more generally used, or less generally used, no witness disputes the fact that both motors are and were in general use. Again, in

answer to direct interrogatory number twenty-one, which interrogatory reads: "Are synchronous motors in general use?" The answer of Mr. Davis occurring on page 860 of the record is "Yes," and the answer of all the other experts whose testimony was taken upon the subject is the same, and the testimony of Mr. Kinzie is to the effect that synchronous motors have been in general use for many years, long before the execution of the contract of October, 1909.

There is nothing, then, in the testimony of any of these witnesses to support the finding of the Court or this statement of counsel. Again, on page 16, counsel make the statement that it is further to be observed that the appellants ordered a curve-drawing wattmeter to be placed upon the appellee's circuit. Here let it be said that the appellants have placed upon each circuit a wattmeter, as explained by general superintendent Kinzie in his testimony, and that it would be highly proper to place a wattmeter upon appellee's circuit. The purpose of placing these various wattmeters upon these various circuits is not to measure the current. This function the wattmeters cannot perform. Nor is there any reason why appellants should measure the current upon their own circuit, for they are using the current themselves. The object of placing wattmeters upon these circuits is obvious. The wattmeter measures the quantity of power actually developed. The ammeter measures the

volume of current at a fixed voltage that is being developed. By reading the wattmeter and the ammeter, one is enabled to see at an instant how much of the current is distorted and wasted. That is to say, how much of the current registered by the ammeter is not developed into actual power as indicated by the wattmeter. 'This furnishes an effective check upon the apparatus and enables the operator to determine its efficiency from time to time. It, for instance, enables the appellant companies to determine that they are operating at a power factor which ranges from 85 to 95 per cent., and would inform them immediately of the fact that there was something wrong with their apparatus by showing that the power actually developed from the current was less than this. appellee should do the same thing with its circuit is apparent from the fact that it is operating at about 60 per cent. Suffice it to say that if the wattmeter and ammeter readings made by appellants on their own circuit should indicate that they were operating at any such power factor as this, the machinery would be at once shut down and the cause of this low power factor ascertained and corrected. This is exactly what the appellee should do. If it did this, it would make no material difference whether it used induction motors or motors of the synchronous type, for the power factor loss when the motor is operated at from 85 to 95 per cent. is very slight, and

it makes but little difference whether motors of the induction type or motors of the synchronous type are used. But where no such precautions are taken, and motors are permitted to operate at 60 per cent. or some other power factor probably very much less than 60 per cent., the difference of course, becomes enormous. Appellee should install a wattmeter upon its circuit, not for the purpose of measuring the current furnished them by the appellants, but for the purpose of measuring the power actually developed by it in order that it may determine how much current it is wasting from time to time and correct the difficulty that causes the waste whenever such difficulty occurs. It is not the duty of the appellants to furnish a wattmeter for this purpose, for they are only obliged to furnish the current, and the wattmeter when so used is used as an aid to developing the current, which is the business of the appellee.

The statement then proceeds on page 16, and counsel quote further from the findings of the Court as follows:

"The Court further found that in making the contract the Oxford Mining Company relied and had a right to rely on the representation made by the appellants, to the effect that it was the purpose of the appellants to furnish the amount of power stipulated in the contract, for real, actual and working efficiency, together with such momentary surges necessary to start the machinery of the Oxford Mining Company, or its successors; and to give to

the Oxford Mining Company, or its successors, the uninterrupted use of 300 real horse power to be used in connection with ordinary motors commonly used upon loads of 300 horse power or less, including induction motors."

This finding of the Court, like its previous findings, is wholly without any previous testimony to support it. There is no evidence that any representations of the character mentioned were ever mentioned to the Oxford Company. No witness testified that any such representations were made, and the contract entered into between the parties negatives the fact that such representations were made. The only representation that Mr. Bradley made to the Oxford Company was in his letter to Mr. Endicott wherein he stated that in his opinion 150 horse power was ample to operate the Sheep Creek mines, and this representation Mr. Endicott did not rely on, for he called in his own expert, Mr. Thane, who told him that 300 horse power would be required, and the amount reserved was afterwards by agreement of the parties changed from 200 to 300 horse power.

On page 17 it is stated that no power or current was delivered until the 8th of November, 1912. This statement is undoubtedly true, and the reason that no current was delivered until that day is found in the fact that none was demanded. Prior to that time the appellee had no use for current. Had current been demanded before that time, it would have been fur-

nished. Counsel states in substance that because they did not get power until the 8th of November, 1912, that it was inequitable for them to deprive the appellee of momentary starting surges after that, which he states are only worth 5 cents each, figured upon a basis of \$87 per horse power year. Here let it be said that while it is true that a starting current of 30 seconds, calculating the volts and the amperes actually furnished during those 30 seconds, would only be worth probably 5 cents per horse power year, this does not do away with the fact that under the decree of the Court the appellants must be ready to furnish these starting surges at any and all times and must, therefore, keep in reserve sufficient current to furnish these surges. This current so kept in reserve is of no use to anyone except during the 30 seconds when it is actually drawn by the appellee; the balance of the time it circulates idly in the circuit. But this does not change the fact that the appellants must generate it and keep it where it is available at all times, and that this is equivalent to furnishing it at all times, even though it is only demanded at infrequent intervals. In answer to cross-interrogatory number 19, Mr. Davis of the General Electric Company, when asked as to the value of these starting currents, testified as follows:

"The value in kilowatts of a thirty second starting surge of 600 horse power as measured by the amount of water used will be 5 cents, but the value as representing interest charges, maintenance and

operating costs applying to generator, transformer and distributing capacity will vary from \$20,000 to \$50,000 per annum" (see evidence Davis, Record, page 865).

Again, in answer to cross-interrogatory number 20, Mr. Davis, after testifying to the direct losses that would result from the drawing of these surges, uses this language:

"The indirect losses from such injury to the regulation might prove to be a serious matter."

Professor Cory, in answer to the same question, does not estimate the exact cost per year of maintaining the additional machinery necessary to furnish these surges, but says that machinery and appliances of sufficient size to allow such starting surges would be very considerable (see evidence Cory, record, page 830). In answer to cross-interrogatory number 20, found on the same page of the record, Professor Cory uses this language:

"These surges require an increase in the size of the plant, increasing the investment necessary, and what is of more serious consequence, such surges interfere with the service given by the plant to all other circuits or customers."

Mr. Hunt, in answer to cross interrogatory number 19, the answer to which is found on page 901 in the record, testified that the value of such a surge, as measured at so much per horse power year would be 5

cents. "However, this is not a measure of the value of such a surge. The amount of such a surge in relation to capacity of plant may be such as to require an investment in electrical apparatus, greater than the total investment for such apparatus for handling 300 horse power without such surges."

(See evidence Hunt, Record, page 901).

Again in answer to cross interrogatory number 20, Mr. Hunt uses this language: "Such surges do have a very serious effect upon the operation of a generating plant, especially when the ratio of the amount of such surges to the plant capacity is considerable, and the operation of other connected load may be seriously interfered with under such conditions. Such interference may be so serious as to make the remaining power which the plant is capable of producing absolutely unfit for some uses."

(See evidence Hunt, Record, page 902).

The answer of Mr. Heise to interrogatories numbers 19 and 20 is of like effect. (See evidence Heise, page 936.) Mr. Quinn, the eningeer in charge of the business of Allis-Chalmers Company, in answer to the same cross interrogatory number 19 on page 972 of the record testifies as follows: "The value in United States Gold Coin of a 600 horse power starting surge continuing during a period of 30 seconds is practically

insignificant. The value of keeping such a surge off the supply system cannot be measured in dollars and cents. Such a surge under some conditions might cause the suspension and shutting down of all mining operations which were receiving their electric power from the source of supply affected by such a surge," and in answer to cross-interrogatory number 20 on page 973 of the record, this same witness testified: "Assuming that the source of power is limited and such a surge occurred, and that the source of supply was furnishing electric current to operate electrically driven pumps handling cyanide solutions, the stoppage or interference with the duty of these pumps would possibly cause a very large monetary loss. This is merely an instance where such an interference could cause a serious loss." Continuing the witness says: "If a motor of 300 horse power requires 600 horse power to start, it is reasonable to assume that the Supply Company must at all times have available 600 horse power to start the motor, and if the motor under full load used but 300 horse power there would necessarily be 300 horse power standing idle. Assuming that the cost of installing I horse power is \$100.00, this would represent an investment of \$30,000.00, which at 6% per annum would amount to \$1800.00. To this there should be added depreciation on the idle machinery, which under usual engineering practice in a plant of this kind is computed at 7% per annum, which would amount to \$2100.00 for depreciation."

It must be remembered that all the foregoing answers are based upon a question which assumes that the starting surge will not exceed 600 horse power. The evidence, however, shows that the starting surge required by the motor in use by the appellee far exceeds 600 horse power, and that the starting surge of that motor is approximately five times as great as its running current. Having in view the foregoing testimony, however, it is not a difficult matter of calculation to determine that the starting surge actually required by the motor now in use by the appellee is so great that it will exceed many times the value of the original 300 horse power, and actually distorts the entire value of the Sheep Creek plant, especially so in view of the fact that the balance of the current there generated is used by appellants in connection with mining operations. In considering this testimony it must also be borne in mind that the character of the witnesses testifying is such as to place their testimony upon the bases of absolute authority. Professor Cory is the professor of electrical engineering at the University of California, and his reputation in connection with electrical matters is such that his word upon matters pertaining to electricity imports absolute verity. Mr. Hunt's reputation as an electrical engineer is likewise an established one, and the other four experts occupy positions at the head of four large concerns dealing in electrical apparatus, which establish them as authorities upon electrical matters.

Counsel then makes the statement that the appellee is doing development work, and that its operations will be delayed or hampered unless it is furnished this current, or, rather this power in accordance with the decree of the Court, insisting that no other current or power is available. We have already shown in the early part of this reply brief that the reversal of the decree would not deprive the appellee of any power, but would merely compel it to use effective apparatus in developing the current furnished. By doing this, it would get just as much power, if the contention of appellants were sustained as it could get under the decree of the Court, and, therefore, its operations can in no wise be affected by a reversal of the decree, except that they will be obliged to install more adequate machinery. Furthermore, the statement that other power is not available and cannot be procured is not borne out in the record. The evidence shows that the appellee is the owner and was at the time of the trial of the case, in possession of a gas plant, which generated a current of over 200 horse power. (See evidence Wallenberg, record, pages 265, 271), and Mr. Thane, the general manager of the appellee, testified on page 211 of the record that in the course of six weeks from the time that he was testifying, which was in the early part of this year, he would have one of the units of the Salmon Creek power plant which was being constructed by the appellee, under operation, and that they would get from five to six hundred horse power from Salmon Creek after that time. Several months have already elapsed since then, so that the appellee has now actually a current of about 800 horse power for its use which is generated by its gas plant and this Salmon Creek plant.

There is, of course, no reason why any quantity of current could not be obtained by the appellees in the same manner that this 800 horse power is obtained by them, either by enlarging the gas plant or developing other water powers besides Salmon Creek. On page 19 of the brief counsel make a statement that when the power was first demanded by the appellee, the appellants placed a practical construction upon the contract, and set their circuit breaker at 100 amperes. This statement is altogether misleading. It is true that the circuit breaker was at first set at about 100 amperes, so that almost 600 horse power could be drawn, but this was in the fall of the year when water was still plentiful, and there was no reason why the appellee should be strictly limited to the amount to which it was entitled. The evidence shows that for certain months of the year there is much water in Sheep Creek, so that there is ample power for everyone. It also shows that during the winter months the flow of water is very slight, so that power becomes scarce and it was in December, when power became scarce that the appellants set their circuit breaker at about 60 amperes with a view of supplying 56.2 amperes, the amount to which it was entitled under the contract. At that time the record shows the water was scarce, and it was necessary to reserve for appellants use of the power to which they were entitled. testimony is that during the month of January, when the case was on trial, the water in Sheep Creek was so scarce that the generators were only generating approximately 500 horse power. Hence, the necessity of limiting the appellee during the winter months to the amount of current to which they were actually entitled. On page 21 occurs a statement that the evidence shows that the voltage maintained amounted to about 300 volts. This is an evident error in printing, as it is conceded that the voltage was maintained at 2300 volts. On page 21 counsel then makes reference to the fact that the Court finds that an instantaneous circuit breaker is not the usual or ordinary type used upon feeders leaving the power house, and that the usual and ordinary type of circuit breaker in such cases is the time relay circuit breaker. Here again the finding of the Court is without any evidence to sustain it. Appellants have in use three time relay circuit breakers, one at the Sheep Creek power house, one at the Nugget Creek power house, and one at the steam turbine plant. The use of threse circuit breakers is clearly explained by Mr. Kinzie in his testimony on page 499 of the record. The time relay circuit breaker is only used while an instantaneous circuit breaker is also It can be safely employed upon main lines leaving power houses if instantaneous circuit breakers are placed upon each branch line feeding from the main line so that any short circuit or peak occurring on the branch line will throw out the instantaneous circuit breaker before the main line is affected by the peak. The only way that a time relay circuit breaker can be safely employed on appellee's system is to require the appellee to place an instantaneous circuit breaker between its motor and the time relay circuit breaker. All this matter is fully explained in Mr. Kinzie's testimony. (See evidence Kinzie, record, page 499.) The testimony of Professor Cory, Mr. Davis, Mr. Hunt, Mr. Heise, and Mr. Quinn is to the effect that the instantaneous circuit breaker is the only device that can be employed in this connection. (See evidence Cory, record, page 822; evidence Davis, record, page 862; evidence Hunt, record, page 896; evidence Heise, record, page 932; evidence Quinn, record, page 966.)

Counsel state on page 20 that it is interesting to note that appellants maintain a wattmeter and time relay circuit breaker at Sheep Creek upon their own main line, while they placed an instantaneous circuit breaker and ammeter on appellee's line. The reason for this has already been explained. On page 22, counsel refers to the findings of the Court where the Court finds

that the starting of machinery, which will consume a given amount of power, often causes what is known as a starting surge which lasts from 10 to 30 seconds, but from a practical standpoint is not taken into account or charged for in electrical connections and is disregarded and provided against by the use of the ordinary type of time relay circuit breaker. This statement is fully answered by us in connection with the discussion of the value of a starting current and its effect upon apparatus, and the fact that Mr. Dunn, a bookkeeper for the Puget Sound Electric Light Company, says it is a custom to make no charge for starting surges does not in any wise alter the effect of the testimony of the witness upon that subject. Lighting companies frequently supply very small motors with current and it can readily be seen that such a custom might obtain where the motors were supplied with probably as small as 2 to 4 horse power. But whatever Mr. Dunn's custom may be, it is difficult to see how that can affect the rights of parties in this case.

On page 23 of the record, reference is made to the finding of the Court to the effect that the Alaska Juneau Company is also supplied by appellants with some current, and that it is not charged for starting surges. In this connection it must be remembered that the Alaska Juneau Company is under the same management as the appellant companies, and that it is paying for current measured in exactly the same man-

ner that appellants claim the current of appellee should be measured, and, further, that its circuit is protected by an instantaneous circuit breaker just as the appellee's circuit is. Its motor is not a squirrel cage motor, but a form M General Electric, which requires but a very slight starting current, and the Alaska Juneau Company is paying \$65 per horse power year for its current as against something over \$6 which the appellee's current costs it. The appellants have a right to make whatever contract they see fit with the Alaska Juneau Company, and since the concern is under the same management, these starting currents can be supplied without any inconvenience, except that during the time that the motor is started, it may be necessary to get up steam and increase the general supply of electric current in that manner so as to meet the incoming peak. This can be done in the case of the Alaska Juneau Company, because the demand for surges will not be made without notice, and it is not necessary to keep constantly on hand a large supply of electric current to meet these demands.

On page 25, it is stated that the Court found that it is a common practice, where a certain kind of horse power is used, for the producing company to allow a reasonable starting surge to the customer. There is no testimony in the record upon which this finding can be based. The evidence shows that in the district

of Alaska there are no power companies supplying current to customers in large quantities for mining purposes. Hence no such custom can obtain in Alaska. However, whatever might be the practice in this regard would not in any wise affect the operation of the parties to the contract. In any event, however, there is no testimony upon which to base this finding of the Court.

On pages 25 and 26 counsel makes some reference to the finding of the Court to the effect that the appellants have required the appellee to notify their head office at Treadwell whenever the circuit breaker was thrown out. There are, of course, many reasons that might occur to anyone why the appellants should want to know and be informed from time to time, and if this has caused the appellee any inconvenience, there is no reason why it should not install a circuit breaker upon its own line, set just as the circuit breaker of appellants is set, so that any peak passing over the line would reach the appellee's circuit breaker first and throw it out, and by so doing leave appellant's circuit breaker intact. The appellee could then throw out and throw in its own circuit breaker just as often as it might please to do so without any necessity of notifying the appellants, or without being placed to any inconvenience except to throw in the circuit breaker after it had been thrown out. In any event, none of these matters could have any effect upon the rights of the parties to the contract.

On pages 27 and 28, the counsel refers to that finding of the Court in which the Court finds from the surrounding circumstances that the starting surge was naturally to be implied or to be presumed, and that without a starting surge in connection with induction motors, which the Court finds is the ordinary type in mining use for loads of 300 horse power or less, the practical and beneficial use of more than 100 horse power could not have been obtained. In connection with this finding it may be stated that with the type of motor employed by the appellee not supplied with starting devices of any kind and started under full load conditions, a motor of 100 horse power would probably require the entire 300 horse power or more to start. But the assumption that the parties to this contract had in mind the use of this wasteful and inefficient type of motor to be started under full load conditions without starting devices, is certainly a violent one. It may be true that the motor now used by appellee, not supplied with starting devices, cannot be started unless a current greatly in excess of 300 horse power is furnished for that purpose, but it is equally true that the load could be removed at the time of starting so that no additional starting current is required, and it is also true that the motor could be supplied with starting devices so that it could be started under full load conditions without requiring any additional power.

Professor Cory, Mr. Davis, Mr. Hunt, Mr. Heise, and Mr. Quinn are a unit in testifying not only that this can be done, but that it is entirely practical and is being done. Mr. Thane, the general manager of the appellee, testifying as an expert witness, testifies on page 193 of the record that if starting apparatus were provided, their motor could be started without drawing any additional current. This matter is not open to dispute. Nor is there any doubt upon the subject that the load could be removed and the motor started without its load without requiring an additional starting current. But when this contract was made by the parties, it was not contemplated that the current should be developed by one large motor. The current was reserved for use in the Sheep Creek mines. operate these mines it was, of course, necessary that a number of small motors should be installed in connection with the various pieces of machinery necessary at the mine. If small motors were installed and the same were started one at a time, they could, of course, be started without adding any starting current. this is fully explained by Mr. Bradley in his evi-(See evidence Bradley, record, pages 680, dence. 689.)

Furthermore, a surplus of 59 horse power was allowed or provided for so as to take care of all of these matters. The whole difficulty with the situation lies in the fact that the current was originally reserved to operate the Sheep Creek mines and that it is not now

being employed in connection with the operation of these mines, but in connection with the operation of other mines. That instead of using a number of small motors such as would be installed at Sheep Creek if the current were their usual one, a large motor has been installed. Surely, the parties at the time of the making of the contract did not have any such thing as this in contemplation, for this new use to which the power is now applied did not exist at that time. In any event, there is no ground for determining or for holding that the parties ever contemplated that the entire capacity of the Sheep Creek mine, or at least a large portion of its capacity, should be kept in idleness at all times in order that it might be there when occasional demands for starting currents might be made upon them, especially in view of the fact that starting devices, doing away with the necessity of starting currents are so readily and easily obtainable.

EQUITY WITHOUT JURISDICTION.

In reply to the discussion of the authorities by appellee's counsel, commencing on page 32, with reference to the jurisdiction of a court of equity to enforce the contract under discussion, we have this to say:

In the first place, many of the authorities cited by us are not discussed by counsel, and are not sought to be distinguished. These authorities are on all fours, and cannot be distinguished. As to those cases discussed by appellee's counsel, we will endeavor to show that their interpretation of the cases themselves is at fault, and that the principles laid down in the case are not correctly applied by them.

The appellee relies almost entirely upon Franklin Tel. Co. vs. Harrison, 145 U. S., 459; 36 L. Ed., 776, to support its contention that the personal services and continuous performance involved in the performance of the present contract are not a bar to equity's taking jurisdiction. A closer examination of that case, as set forth in appellants' brief (p. 55), shows that the Franklin Telegraph Co. case cannot be considered an authority in point and that the argument of the appellee, based thereon, must fail.

The difficulty of continuous performance, and the danger of having the same litigation always on the calendar and always before the Court, was in no way considered by the Court or by counsel in the Franklin Telegraph Co. case. Appellee argues that eminent counsel and an able Court must have considered that point. But it is evident that if the Court had had that point called to its attention it would have, in the course of so exhaustive and so careful an opinion, noted and decided it expressly. The question as to equity's having jurisdiction to enforce a contract involving continuous performance is no minor or negligible question, and had the question been raised it would have been considered. It is possible, indeed

probable, that counsel for the appellants did not deem it expedient to raise the question because of personal reasons; and if the question were not raised, the Court would scarcely consider it of its own initiative. At any event, the bald fact remains that the question was in no way considered by the Court; and it cannot be said that the Supreme Court, by ignoring a point, intended to establish a binding precedent.

The appellee's position, moreover, clearly proves how great the danger is of having this case constantly in court, for it argues that if the appellee should install machinery having an unusually low power factor, or should waste the current unduly, the appellant can always seek relief from this court (Appellee's Brief, p. 74). In short, the appellee expressly admits that this suit must be before this court continuously.

The Franklin Telegraph case, moreover, is clearly distinguishable because there was no feature of personal service therein as there is in the present case. Appellee denies this fact without argument, and quotes certain irrelevant passages from the decree of the Court in the Franklin Telegraph Co. case. It is obvious that in operating an electric power plant and in supplying a current of electricity, a high degree of personal skill and discretion is involved; whereas the maintenance and upkeep of a telegraph line already built and in operation is merely a matter of ordinary services. To maintain the plant at Sheep Creek and supply the current ordered by the Court below, the

appellant will be forced to employ highly trained expert engineers and electricians and the services rendered will be subject to all the uncertainties of personal service.

It is, moreover, clear that in the Franklin Telegraph Co. case the defendant was a public service company; and therefore a court of equity woud assume jurisdiction despite the difficulties involved because of the public interest involved. As the Supreme Court said in *Union Pac. Ry. Co.* vs. *Pacific Ry Co.*, 163 U. S., 564, 603, in discussing this class of cases wherein public service companies are involved:

"Clearly the public interests involved in the contracts before us demand that they should be upheld and enforced."

Appellee, in its brief, devotes considerable time and space to an attempt to prove that in enforcing the present contract there would be no difficulty of personal services involved. It is clear that to produce a sufficient electrical current to meet the decree of the lower court, the appellant will have to operate the most delicate electrical machinery requiring the highest degree of technical skill and judgment. Appellee, however, argues that the argument as to personal services is based entirely upon the fact that in certain cases a decree of specific performance would involve involuntary personal servitude. That is not the underlying reason for a court of equity's refusing

to decree the performance of personal services; the fundamental reason is that personal services involve so much discretion, are so intangible and so incapable of measurement by any fixed rule, that a decree ordering the specific performance thereof would be nugatory. The Court cannot, in other words, ascertain whether or not the plaintiff is receiving the kind of personal services desired—it would be impossible and impractical for it to order the performance of an act over which it can have no control. Equity never hesitates to imprison a man for refusing to convey land; the mere involuntary servitude is no barrier; the real barrier is the uncertainty and indefiniteness of the act to be performed. As the Court said in Marble Co. vs. Ripley, 77 U. S., 339, 358,

"These duties are continuous. They involve skill, personal labor, and cultivated judgment. It is, in effect, a personal contract to deliver marble of certain kinds, and in blocks of a kind, that the Court is incapable of determining whether they accord with the contract or not. The agreement being for a perpetual supply of marble, no decree the court can make will end the controversy. If performance be decreed, the case must remain in court forever, and the court to the end of time may be called upon to determine, not only whether the prescribed quantity of marble has been delivered, but whether every block was from the right

place, whether it was sound, whether it was of suitable size, or shape, or proportion. Meanwhile the parties may be constantly changing. The marble company are liable so long as they hold the land, and Ripley's rights exist only while he holds the mill. It is manifest that the court cannot superintend the execution of such a decree. It is quite impracticable."

See, also:

Karrick vs. Hannaman, 168 U. S., 328, 326; Shubert vs. Woodward, 167 Fed., 47, 59.

The appellee's attempt to distinguish between the delivery of a commodity like marble of a certain size and form as in Marble Co. vs. Ripley (supra), and a current of electricity of a certain voltage and amperage, will not stand scrutiny. In both cases a commodity involving skill and personal judgment in its production is to be delivered, and in both cases, equity, because of the impossibility of enforcing its decree, must refuse to take jurisdiction.

The appellee has tried to distinguish various cases cited by the appellant in its brief; but a further examination of the appellee's grounds show that the cases are clearly in point and that the arguments used to distinguish them lack cogency or meaning.

Tex. & Pac. Ry. Co. vs. Marshall, 136 U. S., 393, 394; Law Ed., 389. This case is not based, as the

appellee contends, upon the ground of public convenience. To be sure the interest of the public, since the defendant was a public carrier, was given due weight by the Court; but the Court expressly rested its decision upon the grounds of continuous performance and personal services.

"If the Court had rendered a decree restoring all the offices and machinery and appurtenances of the road which have been removed from Marshall to other places, it must necessarily superintend the execution of this decree. It must be making constant inquiry as to whether every one of the subjects of the contract which have been removed has been restored. It must consider whether this has been done perfectly and in good faith, or only in an evasive manner. It must be liable to perpetual calls in the future for like enforcement of the contract, and it assumes, in this way, an endless duty, inappropriate to the functions of the court, which is as ill-calculated to do this as it is to supervise and enforce a contract for building a railroad, both of which have in this country been declared to be outside of its proper functions, and not within its powers of specific performance."

Berliner Gramophone Co. vs. Seaman, 110 Fed., 30, 31. It is impossible to argue that because the contract in the Berliner Gramophone Co. case was entirely executory, it can be distinguished from the present case where the appellee's covenants have been partly prformed. The difficulty in both cases arising from continuous performance and personal services is

precisely the same, and the fact that the contract is partly executed or entirely executory is of no significance, either on reason or on authority.

General Electric Co. vs. Westinghouse, 144 Fed., 458. The fact that in this case neither party had changed its position was not taken by the Court as the sole and final ground for denying equitable relief. The Court expressly rested its decision upon the impossibility of ordinary specific performance.

"Assuming that the contract is valid between the parties, is it of such a nature that equity will interfere to prevent a violation thereof by either party? It is clear that equity cannot compel the General Electric Company to manufacture and sell to the Westinghouse Company controllers such as are described in the complaint. It is a continuing contract, running for 15 years, and the courts will not undertake to supervise and compel performance of such a contract."

Sewerage & Water Board vs. Howard, 175 Fed., 355, 559. Had the appellee quoted the full paragraph wherein it found a statement upon which it bases its argument that the bill was dismissed because of an adequate remedy at law, the fallacy of that contention would clearly appear.

"Furthermore, the bill alleges that complainant will be damaged in a definite sum by the anticipated violation of the contract, and it does not allege the insolvency of respondent, or suggest that, for any reason, damages could not be collected. It is evident that in this case the Court cannot make a decree ending the controversy, and, if performance be decreed, the case must remain in court for a long and indeterminate period."

Lone Star Salt Co. vs. Texas Railway, 90 S. W., 863. It is true that in this case there appeared the additional difficulty of superintending the plaintiff's business; but that additional difficulty is peculiarly applicable to the present case, for the appellee has admitted in its brief (p. 74) that the Court must regulate the appellee's plant to prevent the appellee from wasting the current or using wasteful machinery. Moreover, the absence of such additional difficulty does not allow equity to enforce a contract wherein the difficulty of continuous performance arises.

Pacific Electric Co. vs. Campbell Johnson, 94 Pac., 623. It must be clear that the same difficulties of continuous performance and personal services that prevented the Court from decreeing the operation of a railroad will prevent the Court here from decreeing the operation of an electric plant. The difficulties involved in both cases are precisely the same.

Peterson vs. McDonald, 110 Pac., 465 (Cal.). It is difficult to see how the appellee can admit that the pumping and delivery of water in this case involves personal services and yet deny that personal services are involved in the generation and delivery of a current of electricity. There is no involuntary servitude

involved in one case any more than there is in the other. The appellee's admission that personal services are involved in *Peterson* vs. *McDonald* and its assertion that the decision was rested on the impossibility of decreeing the performance of personal services is simply a restatement of the appellant's argument and shows conclusively that a court of equity cannot take jurisdiction in the present case.

The case of Gallagher vs. Equitable Gas & Light Co., 141 Cal., 699, 708, cited by appellee as overruling in effect Peterson vs. McDonald, was simply a mandamus issued against a public service corporation ordering it to supply gas to a customer. It is clear, as the Court therein says, "it is not an action for specific performance in the strict sense." The gas company can go out of business so soon as it chooses; the Court simply holds that so long as it is a public service corporation it must serve all who apply. In the present case the Court is enforcing a contract between private individuals; the appellant can never cease generating current, and, moreover, is in no sense a public service corporation. It is easy enough for a court to order a public service corporation to supply gas at so much a cubic foot to a customer while it remains in business; it is entirely different to order a private corporation to generate and deliver a current of electricity forever.

Pantages vs. Grauman, 191 Fed., 318. This case is expressly admitted to be in point by the appellee. All that the appellee says thereunder as to good faith, skill and business judgment of the parties and the inability of the Court to enforce its decree applies with equal vigor to the present case.

The additional cases, cited by the appellee, are clearly not in point.

Ala. Rwy. vs. Highland, 98 Ala., 407, 13 So., 684. The Court in granting relief here expressly stated that it could not order the defendant to construct and maintain the crossings because of the personal services and continuous performance involved; but the contract expressly provided that if the defendant failed to construct and repair the crossings the plaintiff could do so at the expense of the defendant. So the relief ordered was simply the payment of money.

"If the agreement had stopped here, possibly it would have left the Highland & Belt Company under the contract obligation to personally construct and repair the necessary crossings—a service in its nature personal, 'involving the exercise of personal skill, judgment and discretion,' and of indefinite duration. So interpreted, the chancery court possibly would not and could not undertake to administer and specifically enforce such contract. But the agreement did not stop there. Its provisions are that if the Highland & Belt Company, after 30 days' notice, failed to renew or repair such crossings, then the South & North Company could do so, at the cost and expense of the

Highland & Belt Company. This, upon each recurrence, could only entail a money liability, and would not impose on the chancery court the duty of retaining the case for continuous administration."

Schmidt vs. Marble Co., 101 Ky., 478; 41 S. W., 1024. This case involves a public service company, a railroad, and the interests of the public make it necessary in such cases for equity to decree specific performance. In the present case, however, there is neither a public service company nor the interest of the public involved. As the Court said in Lone Star Salt Co. vs. Texas Short Line Ry. (Texas), 90 S. W., 863, 868, these railroad cases are not in point at all.

"These cases have little other resemblance to the one before us than that most of them were actions for specific performance in which the principles governing the remedy were discussed and applied. The effect of all of those in the Supreme Court of the United States, except the case of the Telegraph Company vs. Harrison, was to require the defendants to admit the plaintiffs to the use of tracks, terminals, or rights of way, or other property to which use the plaintiffs were entitled, either by contract or by law. It was necessary only for the courts to require that the defendants allow the plaintiffs to exercise the rights to which they were entitled under the law or the contract. The courts did not have to direct the management of the businesses of the parties, except in the arrangement of some details for which the contracts furnished the rule. The Telegraph case was of the same nature. The contract bound the defendant, who had purchased a telegraph line from plaintiffs, to maintain upon the poles in their line a wire of which the plaintiff was to have the use in sending messages. The decree merely required the keeping up of the wire for plaintiff's use."

Barley vs. Collins, 59 N. H., 402. In this case the only relief asked and granted was an injunction restraining the defendant from manufacturing or selling any leather board in violation of his contract. It is elementary that in restraining a defendant from acting none of the difficulties that arise in ordering him to act are present.

Hackett vs. Hackett (N. H.). Since no citation is given for this case in appellee's brief, comment upon it is impossible.

Chubb vs. Peckham, 13 N. J. Eq., 207. The support ordered in this case was probably the payment of money to the plaintiffs; clearly there was no personal service involved. Moreover, the Court does not consider at all the difficulties arising from continuous performance.

St. Regis Paper Co. vs. Santa Clara L. Co., 65 N. E., 967 (N. Y.). The decision in this case was not that the contract be specifically enforced, but simply that the issues be tried to ascertain whether or not the contract was one that equity could enforce.

"The view we entertain of this case renders it

unnecessary to decide at this time whether a court of equity should enforce the specific performance of this contract, or should confine the relief granted to the enforcement of its negative covenants.

"After the issues have been tried and the precise facts in this case established, the trial judge will be in a position to determine whether the Court will decree the specific performance of the contract and issue its injunction in aid thereof, or confine the relief to the enforcement of the negative covenants."

It therefore follows that this case is not in point. And moreover the contract in that case would extend only over a period of ten years; in the present case it will be before the Court forever, since there is no limit set to the appellant's covenants.

The citation taken from the Cyclopedia of Law and Procedure by the appellee is not by Professor John Norton Pomeroy, author of Pomeroy on Equity Jurisprudence, but is by John Norton Pomeroy, Jr.

Texas Co. vs. Central Fuel Oil Co., 194 Fed., 1. The Court expressly limits the application of the doctrine therein announced by the facts that the contract runs only for ten years and no personal services at all are involved.

"The contract sought to be enforced in this case runs for 10 years only, and involves no 'skill, personal labor, and cultivated judgment.' What it does require is easily ascertainable, and, if carried out in good faith, ought not to give rise to any disputes requiring the interposition of the Court. During the time it was complied with by appellee no disputes arose, and there is no reason for anticipating any now if good faith will control the actions of both parties. That some differences may occur is true, but they are not likely to be of a nature requiring much consideration."

On page 50 of the brief, counsel in seeking to argue that the contract was so ambiguous as to require parole testimony to explain it, quotes from the contract these two clauses: "a current not to exceed 300 electric horse power" and the clause "the 300 electric horse power hereinbefore mentioned." It is claimed by counsel that parole testimony is necessary to show whether under the contract it was intended that a current containing the energy contained in 300 horse power, that is to say 300 apparent horse power, was to be furnished, or whether 300 actual developed horse power was to be furnished. Now, on page 54 of the brief counsel used this language: "Certainly no one contends that anything was to be delivered other than current." A reading of the contract leaves the matter so clear that the thing to be furnished was current that there can be no question as to the intention of the parties in that regard, but the concession of counsel upon page 54 of the brief puts the whole matter beyond controversy. If it is conceded, and as we have stated before, that the contract does not permit of anything else than current to be furnished, then there is no

longer any ambiguity as to whether the thing to be furnished is current or power, and there is not even the slightest excuse for the admission of parole testimony to explain that matter.

THE CONSTRUCTION OF THE CONTRACT.

On page 54 of the brief counsel for appellee state that there is no contention but that the thing to be delivered was current and not power. "But," says counsel, "the question still remains open as to the quantity or volume of that current." Counsel inquire:

"Was it to be such as, with the use of costly intricate and unusual machinery, might be theoretically capable of developing the specified amount of power, or was it that current which, with the use of unusual, ordinary and appropriate machinery, was capable of producing a like amount?"

We respectfully submit that when it is conceded that the thing to be furnished is current, there is very little left to discuss. If the thing to be furnished is current, then the thing to be measured is current and the unit of measurement is the electric horse power. There is no dispute upon the question of what electric horse power consists of. The quotation from Mr. Foster, made in our original brief on page III, is in accord with all the authority upon the subject. Mr. Foster's definition of electric power and its formula for measuring the same is as follows:

"Electric power (symbol p) is measured in watts,

and is represented by a current of 1 ampere under a pressure of 1 volt, or 1 Joule per second. The watt equals 107 absolute units, and 746 watts equals 1 horse power."

All the engineers called in the case agree that this is the way to measure current, that is to say, by multiplying the volts by the amperes, which gives us the number of watts, and if we desire to use the horse power as a unit, it becomes necessary to divide the product by 746, the number of watts in an electric horse power. But counsel says this is theoretical. It is not more theoretical than to measure a bushel of wheat by 60 pounds or a yard by 3 feet. It is simply the way, and the one way, to measure current.

The inquiry of counsel as to whether it is to be a current from which the required mechanical horse power could be developed by costly, intricate or unusual machinery, or one from which the required amount of actual power can be developed by means of ordinary machinery, has nothing to do with the case. The current is measured by measuring the energy contained in it, and that is all there is to it. It does not make any difference whether it is developed by one type of machinery or another, or whether it is ever developed. When a current sufficient in quantity to measure 300 electric horse power is delivered at the bus bars of the Sheep Creek generating plant, the terms of the contract are complied with. The question is, not how much shall or can be developed, but

the question is, what energy does the current contain as delivered? The current is the thing to be measured, and it can be measured in but one way, by multiplying the volts by the amperes and dividing the product by 746, which gives us the quantity of current measured by the horse power as a unit. Nor is it true that such current can only be developed into 300 horse power by the use of costly, intricate or unusual machinery. The synchronous motor in small units is slightly more expensive than the induction motor. But it is not intricate nor unusual, although the number of induction motors in small units in use probably far exceeds the number of synchronous motors in use. But in practical effect it is not necessary that this current should be developed by means of a synchronous motor in order to develop approximately the required 300 mechanical horse power. The evidence shows that the induction motors of appellants are operated at a power factor of from 85 to 95 per cent. When induction motors are thus operated, the power factor loss is but slight, and in developing a current of 300 horse power, would not exceed probably 25 to 30 horse power. The difficulty with the appellee is not so much that it employs a motor of the induction type, as that it operates this motor at a very low power factor. Why the power factor of appellee's motor is down to almost 60 per cent., we do not, of course, know. But it may be due to the fact that the transmission wires are about four miles long, or to the fact that the transmission wires have not been properly installed, or to the fact that the motor is inefficient, or it may be due to a lack of skill in operation, but the fact remains that the power factor of appellee's motor is very low and that with appellee's motor it requires a current of approximately 500 horse power to get 300 horse power. The appellee might install a synchronous motor and either let it get out of repair or operate it carelessly, and the result might be no better. These are matters wholly within control of the appellee and beyond the control of the appellants. The current is delivered to it and it lies with it to develop the current so delivered.

Counsel makes frequent use of the expression "ordinary and usual type of motor," but this expression means nothing. Synchronous motors are ordinary and Induction motors are ordinary and usual. usual. Synchronous motors can be operated so as to develop all the energy contained in the form of current into energy in the form of mechanical power. On the other hand, either type of motors may be operated so that a small per cent. of the energy contained in the current is developed into energy in the form of mechanical power. If induction motors were all operated at a fixed power factor, electricians might possibly be able to adopt a system of measurement for the measurement of current under which a current of a fixed

number of horse power would be a current from which horse power to the extent so fixed could be developed by the induction motor. This would simply be measuring the current in the old way and adding to the amount of current to be furnished a certain per cent. to meet the power factor loss of the induction motor. But since induction motors do not operate at a fixed power factor, the power factor of each induction motor being different from the power factor of every other induction motor, and since the power factor is affected by so many other things, such as the length of transmission wires, number of transformers in use, and the like, and, in addition to this last power factor, varies from moment to moment, depending upon the conditions of the load, it would be wholly impossible for electricians to adopt any such system of measurement.

Nor is there any evidence or authority to the effect that anyone has ever attempted to adopt such a system of measurement until this suit was started. To do so would be to adopt a unit of measurement that would vary in size from moment to moment, and to leave the size of the unit entirely to the discretion of the purchaser, would lead to the most ridiculous conclusions. What would be a current of 300 horse power one moment would only be a current of 200 horse power the next moment, and probably the next moment the same current would be a current of 500 horse power. No witness testified upon the trial that he had ever

seen current measured in that manner, for the obvious reason that current could not be so measured. If developed power were the thing to be furnished, it would, of course, be measured by means of a wattmeter, but no one would make a contract to furnish developed power without specifying in the contract how the current supplied was to be developed into power if the matter of developing the power was left to the purchaser, or without specifying in the contract that the power should be developed at a power factor of not less than a fixed per cent.

It is to avoid all this that contracts are made for the delivery of current, which leaves the matter of developing the current into power entirely to the purchaser so that he can operate at whatever power factor he sees fit. The admission of counsel that the thing to be furnished is current can have no other effect than to work a reversal of the trial Court's decree, for the effect of this decree is that the thing to be furnished is power. This power which is to be developed by the appellee to be sure, but that does not change the effect of the Court's decree, for the unit of measurement is by the Court applied to the developed power and the quantity of current used up in developing this power is left entirely indefinite and unmeasured. Power alone is to be measured. The construction contended for by the appellants is not, as counsel states in his brief on page 55, a theoretical or technical

one. Appellants merely apply to the contract the well-known, ordinary, usual, and in fact, the only rules in existence for the measurement of electric current. Nor is the construction asked for by the appellee a practical one for, as we have shown, it is not only impractical but impossible. The appellees ask that the current be measured in a manner heretofore entirely unheard of, and entirely impossible of application. Counsel then devotes several pages of their brief to a further discussion of the testimony in relation to the matters that led up to the execution of the contract. All these matters have been previously discussed, and we will not again refer to them here. this connection, counsel re-asserts the fact that the contract was appellant's contract. Why it was appellant's contract, we are unable to see. Mr. Shackleford testified that the original draft of the contract was in his handwriting (see evidence Shackleford, record, page 104), and Mr. Shackleford was the party representing the appellee's predecessor in interest in this transaction. If the contract was anyone's contract in particular, it was the contract of the Oxford Company. We think, however, that it would be fair to say that the contract was prepared by the parties jointly, and was as much the contract of the one party as it was the contract of the other. The discussion of counsel in this connection with reference to secret intentions is wholly beside the issue. There is no evidence that any of the parties had any secret intentions

or that the real intentions were not expressed in the contract. We do not further esteem it important to reply to that portion of the brief of counsel for appellee. It is interesting to note that counsel on page 61 of the brief refers to his clients in making this contract as persons not well informed in matters of this kind, in view of the fact that they had called in Mr. Thane as an expert, and relied upon his judgment in dealing with Mr. Bradley. But all this matter has been gone over before, and we will not again discuss it here. Counsel seeks the aid of the well-known canon of construction that where a contract admits of two constructions, one of which would be equitable and the other inequitable, the Court will adopt that construction which is most equitable. We have already discussed this canon of construction and its application to the facts in this case in our original brief on page 129, and respectfully refer the Court to the discussion there had.

On page 64 et seq. of the brief, counsel discussed the matter of surges. We have already gone fully into that matter in our original brief, and will not here repeat what has there been said except to again call the Court's attention to the expressed finding of the Court that the matter of surges was never discussed by the parties and to the express language of the contract that the current is to be a current of not to exceed 300 horse power. On page 66 of the brief, however,

counsel makes the statement that it is admitted that if a unit of 300 horse power were installed, that is to say, if a separate generator were installed having a capacity of 300 horse power, they would be able to draw from such generator momentary surges of current in excess of 300 horse power. In this connection, let it be stated that if such a unit, that is to say, a generator with a capacity of 300 horse power were installed, that generator would only generate a current equal to the current that is now being furnished the appellee by the appellants, that is to say, a current of 56.2 amperes with a voltage of 2,300 impressed on a three phase circuit, just such a current as the appellants claim the appellee is entitled to under the contract. It is, furthermore, so self-evident, that it requires no discussion that a current of 300 horse power capacity will not generate a current of more than 300 horse power without over-taxing the generator. may be true that in rating apparatus the manufacturers leave a slight margin so that the apparatus may be operated to its full rated capacity with safety, and that this rate of capacity may be exceeded, but to do so is to risk the safety of the apparatus itself. Apparatus is only designed to do what it is rated to do. Whenever anyone compels it to do more, he is doing so at his own risk. Counsel use an illustration which is very much in point. They say that an automobile so difficult to crank that a man is required to crank it can be cranked by a boy. That is to say, the boy can

exert an unusual amount of energy for his size and do for a moment the work of a man. This illustration is used to illustrate the fact that a generator of 300 horse power for a moment might be compelled to generate a current greatly in excess of 300 horse power. The counsel should have carried the illustration further. One cannot require a boy to do the work of a man without taking the chance of breaking the boy's back, nor can one require a generator having a rated capacity of 300 horse power to furnish a current in excess of 300 horse power without taking chances of burning out the generator. This is simply another illustration of the slipshod and careless manner of using and operating the apparatus employed by the appellees. No careful operator would ever think of using apparatus in this manner. The statement of counsel that the artificial voltage maintained by appellants is not necessary for their use and that the constant voltage maintained by the appellants is not necessary for their use, is mere quibbling. If the current furnished was never used except by one motor, it might not be necessary to maintain a constant voltage, but the moment that more than one motor is placed upon the circuit, the voltage must be kept constant or the speed of the motors would vary. If the appellee was furnished with a current of varying voltage, it would have to install a Terrell regulator to regulate the voltage, or do, as they did before the Terrell

regulator was invented, employ a man constantly for that purpose. There is no doubt but what appellants could be required, and would be required by a court, to furnish current at a fixed voltage if they were not doing so, for any other current would be entirely useless unless the entire current were used up by one motor.

There is no complaint anywhere in the pleadings or elsewhere that this voltage is not maintained at the standard adopted for that purpose, nor is there anything to prevent the appellee from reducing it or increasing it by means of a transformer if it prefers either an increased or decreased voltage. The contention of appellees that the surges passed with the main current as an incident thereto is entirely without merit, and has no foundation either in reason or authority. Counsel says that if A granted to B a parcel of land in the midst of land owned by A, a right-ofway over lands passed to B with the grant of the parcel itself. This is quite true, but the reason that this right-of-way passed is because A would not be able to get to his land except by crossing B's land, and since the grant was from B a right-of-way would be implied. This would be analogous to saying that since the appellee is required to take the current from and at the generating plant, it has a right of way of necessity over the lands of the appellants lying between the generating plant and appellee's land for the purpose of stringing wires and placing poles in order that it might reach the place of delivery. But this does not mean that because an expressed current of 300 electrical horse power is granted, an implied current of 300 electric horse power, or 1,500 horse power, passed with the 300 horse power, so that the current granted is not 300 horse power, but 1,800 horse power. Counsel says:

"Assume in the case at bar that the 900 per cent. excess of power testified to by some of the witnesses as sometimes consumed in overcoming the inertia of machinery was necessary to start that of appellee; that is to say, assume that in order to start its machinery appellee must have a current nine times more potential than that required for operation, the result would be that under appellant's alleged conception of the contract, appellee's available power would be only 33 1/3 horse power because as it required nine times this amount to start its machinery, that is, 300 horse power, and as the contract limited the amount to which appellee could in any event be entitled to 300 horse power, it must necessarily follow that appellee must confine its operations to machinery consuming in operation not over 33 1/3 horse power."

To assume on the other hand that appellee would be entitled to a starting surge nine times as great as its running current; and that, although the contract provided that it should be entitled to a current not to exceed 300 horse power, it would, nevertheless be entitled to a current of nine times 300 horse power, or

a current of 2,700 horse power, is highly unreasonable. Would it not be more reasonable and equitable to require the appellee to use reasonable, ordinary starting devices or require the appellee to remove its load at the time of starting so that it could start its machinery with the amount of current required to run it and receive a current of 300 horse power and that it operate a motor utilizing such a current in its operation? This is the only fair and reasonable way out of the situation. It is beneficial and just to everyone. It results in making the best use of the current furnished and gives to each party a fair and reasonable proportion of the current generated. The appellee's counsel then direct their attention to the decree itself. We have already discussed this decree, pointed out its objectionable features and its uncertainties. We have shown that the decree on its face is very much more uncertain than the contract which it attempts to construe, and these matters will not again be gone into at this time.

We desire to add, however, a further objection to the decree that was not referred to in our original brief, and it is this: The contract provides that while the current to be furnished is to be an uninterrupted current, the appellants shall not be liable for damages that may arise from operating or other causes beyond their control, that is to say, they shall not be liable because of break downs and shut downs made necessary in order to make repairs and shall not be liable if the current cannot be generated because of a shortage of water. Nowhere does the decree make any provision to relieve the appellants from the necessity of furnishing current under the conditions mentioned. There is no provision in the decree that the appellants shall be relieved at any time from furnishing current in the event that the water is not sufficient or other conditions made necessary from causes in connection with the operation of the machinery. That the decree is erroneous in this regard must of course be conceded by all.

Just one more word with reference to the wattmeter. The wattmeter is the instrument devised for the purpose of measuring the power actually drawn from the circuit. It does not measure the energy contained in the circuit, and cannot be used to measure current. It does not make any difference whether the wattmeter is placed in appellants' power house or anywhere else on the circuit. It will only record the number of watts actually taken from the circuit at the point where the motor is situated, without reference to where the wattmeter is placed. It does not take into account that portion of the current which has been distorted, nor does it in anywise measure the current circulating in the circuit. It was not designed to measure current, and cannot be used for that purpose. It measures power only, and no power except the power that is drawn from the circuit, that is to say, the power that

is actually developed. To measure a current, as distinguished from the power that is developed, an ammeter and a voltmeter are necessary, or, if the voltage is kept constant, an ammeter alone suffices for that purpose. Upon these matters the testimony is conclusive, and uncontradicted.

Counsel again on page 73 refer to the fact that a time relay circuit breaker is installed on the main trunk line leading from Sheep Creek to appellants' mines, and refers to this as evidence of the fact that appellants' circuit will be protected from incoming peaks if such time relay circuit breaker were installed on appellee's circuit. Not so. It is true that there is a time relay circuit breaker on the main line of the appellants, but it is equally true that in addition to this every branch line is supplied with an instantaneous circuit breaker, so that there is an instantaneous breaker as well as a time relay circuit breaker between each motor and the generating plant. In order to create the same conditions on the appellee's circuit, if a time relay circuit breaker were installed on the generating plant, it would be necessary to install, in addition to this, an instantaneous circuit breaker between the motor and the time relay circuit breaker.

On page 75 of the brief, counsel attempt to quote from a portion of the testimony of the witness Proebstel. In doing so, however, they quote only a part of the testimony of that witness. The witness Proebstel testified, on page 411, that in order to start a motor of 300 or 400 horse power capacity in appellants' mining plant, it is necessary to get up steam and generate additional current by means of the steam turbines and thus supply the additional current required. Having this apparatus handy, and knowing when the additional current would be required, because the motor to be started was under the appellants' own management, the witness says it was not a serious matter to start the motor. However, he says, in answer to a question of how serious a matter it would be: "It is this serious that under our present operating conditions if one of the motors that I speak of happens to be idle and the steam plant not running, that we take precautions to get one of our 1000 kilowatt generators on our bus before we attempt to start that 400 horse power motor under the conditions I have stated." This explains the testimony which counsel attempted to quote.

That portion of counsel's brief which follows in relation to synchronous motors has already been fully discussed. Counsel then devotes some space to discussing the value of the Sheep Creek power. In this connection we will only say that the property turned in by appellee's predecessor in interest is valued in the contract at \$25,000, and that the contract itself is valued by Mr. Thane in his prospectus at something not less than \$150,000, so that appellees did very well

in executing the contract. And we think it is but fair that since the appellants have, according to the terms of the contract of April 22nd, expended in excess of \$100,000, and are required perpetually to keep the plant in repair and keep it in operation, and in addition to this must furnish the appellee so much of the first current generated as will be a current of 300 horse power, so that for a greater portion of the year appellants get no current at all, and at no time get more than what is left after a current of 300 horse power has been taken, the current generated should be divided as appellants claim. This would give to each a fair proportion in accordance with the original investment of each. If anything, the appellee would get considerably the best of it for it gets the winter power when power is most valuable.

Counsel for appellee then says that there is no evidence of waste. There is this evidence, however, that the motor employed by the appellee distorts 40 per cent. of the current furnished so that that much of the current is wasted and lost. Of this appellants, of course, can make no complaint, but they do contend that the appellee should suffer the result of the waste caused by this, and that appellants should not be burdened with it.

The statement of counsel that a reversal of the decree would result in requiring the establishment of a separate unit is entirely outside of the facts. If the contention of appellants is sustained, the appellee would get just exactly what it would get from a generator of 300 horse power capacity, nothing more and nothing less.

We believe that this would be fair, just and equitable, would work no hardship to any of the parties, while, on the other hand, the affirmance of the trial Court's decree would result in distorting the entire value of the Sheep Creek plant to appellants and deprive appellants of their entire investment there made.

Referring again to the written contracts which are involved in the controversy in this action, appellee's brief contains the following declaration:

"Certainly no one contends that anything was to be delivered other than current, but the question still remains open as to the quantity or volume of that current" (Appellee's Brief, p. 54).

We believe this declaration to be of controlling importance, because appellee thereby concedes beyond all doubt and question that the contracts referred to, by the express language and agreements of the parties therein contained, were made to provide for, relate to and control the purchase, sale and delivery of electric current only. No term or expression of these contracts provides for, purports to control, or relates to any matter of power.

Giving due consideration to this concession, it is clear that appellee (plaintiff below) by this action

did not seek specifically or otherwise to enforce the contracts of the parties as they stand, and that the case for appellee is (as we have consistently contended) in effect an action in equity by which plaintiff below applied to the court to reform the written contracts involved and thereupon to specifically enforce such contracts according to the terms of their reformation. In other words, the appellee argues that it is entitled to have the written contract so reformed as to entitle it to what it insists it thought it was getting at the time the contract was executed.

This presents the question: Did plaintiff below make a showing of equities sufficient to justify the trial court acting according to the rules of equity in undertaking to reform the written contracts of the parties?

We contend that plaintiff failed to make such a showing of equities.

The general rule to govern cases of the kind is stated to be as follows:

"Reformation is appropriate, when an agreement has been made, or a transaction has been entered into or determined upon, as intended by all the parties interested, but in reducing such agreement or transaction to writing, either through the mistake common to both parties, or through the mistake of the plaintiff accompanied by the fraudulent knowledge and procurement of the defendant, the written instrument fails to express the real agreement or transaction. In such a case

the instrument may be corrected so that it shall truly represent the agreement or transaction actually made or determined upon according to the real purpose and intention of the parties."

2 Pomeroy Equity Jurisprudence, §780, p. 1541.

"Equity has jurisdiction to reform written instruments in but two well-defined cases: 1. Where there is a mutual mistake,—that is, where there has been a meeting of minds,—an agreement actually entered into, but the contract, deed, settlement, or other instrument, in its written form, does not express what was really intended by the parties thereto; and 2. Where there has been a mistake of one party accompanied by fraud or other inequitable conduct of the remaining parties. In such cases the instrument may be made to conform to the agreement or transaction entered into according to the intention of the parties."

4 Pomeroy Equity Jurisprudence, \$1376, p. 2724.

According to these concrete statements of the applicable rules of equity, plaintiff was required to prove that it had been induced to enter into the written contracts involved by reason of *mistake* or by reason of *fraud*.

"If, then, the agreement was not founded in a mistake of any material fact, and if it was executed in strict conformity with itself; we think it would be unprecedented, for a court of equity to decree another security to be given, not only different from that which it had been agreed

upon, but one which had been deliberately considered and rejected by the party now asking for relief; or to treat the case, as if such other security had in fact been agreed upon and executed."

Hunt vs. Rousmaniere, 1 Peters, 1, 13.

"To entitle the plaintiffs to this relief, they must show that the name of Pickrell, as the party of the second part, was inserted, and the name of the railroad company left out of the contract, by mistake or fraud. In such a case, it is well settled that equity would reform the contract, and enforce it, as reformed, if the mistake or fraud were shown."

Baltzer vs. Raleigh & Augusta Railroad, 115 U. S., 634, 645.

"No fraud, however, is suggested, nor is it alleged that a mutual mistake existed on the point in question. One of these allegations is indispensable in a complaint asking for a reformation of the contract."

Story vs. Conger (N. Y.), 93 Am. Dec., 546, 548.

"A court is not authorized to reform a written instrument upon the ground of mistake, unless it is shown by clear and satisfactory evidence that the instrument as written does not express the intention of both of the parties thereto. Unless the mistake was mutual, or was accompanied by fraud, the parties are to be governed by the terms of the instrument as it is executed."

Hochstein vs. Berghauser, 123 Cal., 681, 685.

"The mere fact that the contract was ambiguous, if such were the fact, did not require relief in the nature of reformation. If the proper construction of it—conceding for the point need for construction—would support appellant's claim, while a different construction was essential to respondents' theory, the situation was not one requiring judicial reformation of the writing from either viewpoint. Reformation is proper when, by fraud or mistake, the writing does not discoverably express the contractual intent the parties mutually proposed incorporating into it."

Pedelty vs. Wisconsin Zinc Co. (Wisconsin), 134 N. W., 356, 357.

"The parties were not acting under a mutual mistake, and, in the absence of proof of fraud, the cross-bill brought by the defendants in the first case, asking to have the contract reformed or delivered up and canceled, must be dismissed."

Chute vs. Quincy, et al. (Mass.), 30 N. E., 550, 551.

See also

Johnston vs. Jones, 66 U. S., 209, 224; Ivinson vs. Hutton, 98 U. S., 79, 82; Snell vs. Insurance Co., 98 U. S., 85, 89; Walden vs. Skinner, 101 U. S., 577, 583; Simmons Creek Coal Co. vs. Doran, 142 U. S., 417, 435; County vs. Youngstown Bridge Co., 80 Fed., 10, 17.

The complaint alleges various items of local history

leading up to the time when the contracts involved were negotiated and concluded by the parties.

Having arrived at that point of time it presents statements of which the following is the gist: (See pages 4 and 5 of Record.)

Messrs. Bradley and Taylor being then the fully authorized representatives of defendant companies, represented "that a current of two hundred electric horse power would be an ample current to continuously mine and operate the said mines and mining plants." The mines and mining plants referred to were those then belonging to defendants. Praylor in the said mines and mining plants.

It is not alleged that the representations above referred to were warranties or anything more than expressions of opinion or that they were untruthful or were wrongfully made. Nothing is alleged to impugn the honesty or good faith of Messrs. Taylor and Bradley in making representations referred to.

The complaint alleges:

"That the representative of the International Trust Company then and there represented to the said Bradley . . . (page 5) that the question of the amount of power which it would be necessary to use continuously in the operation of the International Trust Company's property must be reserved for submission to the said International Trust Company and the parties interested with the International Trust Company in the said properties" (page 5).

The record shows that the defendants thereupon

declined to act upon the alleged representations of Messrs. Taylor and Bradley, but proceeded to act independently, upon the advice of counselors of their own selection and employment, as is shown by the following allegation of their complaint, viz:

"That after taking advice upon the subject, the parties above named decided that they would be in need of the continuous and uninterrupted use of three hundred horse power which would be fully consumed when their operations upon the said properties were resumed; and the said International Trust Company and the parties interested with the International Trust Company notified the said F. W. Bradley that they would be willing to enter into such agreement, provided they were given a continuous and uninterrupted use of three hundred horse power. The said F. W. Bradley, acting for the defendant companies, replied that he would agree to give a continuous current of three hundred horse power in exchange for the property above specifically described, and that thereupon the International Trust Company caused the Oxford Mining Company, a corporation, to be incorporated, and deeded the said property to the Oxford Mining Company for the benefit of the parties interested through the said International Trust Company in the said property; and thereafter the Oxford Mining Company duly executed a lease in the form drawn up and submitted by the said F. W. Bradley at the time the aforesaid representations were so made, with the exception that the words 'two hundred horse power' as originally given in said lease were changed, in all instances, to the words 'three hundred horse power'" (page 5).

The matter above quoted, we think, fully states the transaction of the parties upon which their controversy arises and depends.

It is true that the record also shows much further matter (argumentative and inferential in character) corresponding to contentions of defendant's counsel, but these clearly are mere elaborations of the main fact.

Upon final analysis of everything put forward on the part of plaintiff, its claim appears to be:

- 1. That defendants were guilty of fraud.
- 2. That there was a mutual mistake of the parties.

1. That defendants were guilty of fraud

Because Messrs. Taylor and Bradley estimated and represented that plaintiff required an electric current of two hundred horse power to operate its plant, and made a proposal to plaintiff accordingly. It is not claimed that plaintiff relied upon or was misled by this estimate and representation. On the contrary the complaint shows that plaintiff declined to accept or rely upon this estimate and representation. Plaintiff took advice independently of defendant and then advisedly made a counter proposal to defendant whereby it offered to enter into the written contract first proposed, if one change and one only were made therein. one change was to be made by substituting a provision for an electric current of three hundred horse power in place of the provision for an electric current of two hundred horse power contained in the draft of the contract first proposed.

fendants accepted this counter proposal and the contracts were concluded accordingly. Where in this transaction was there any fraud?

THERE WAS NO FRAUD.

"With all these varieties of external form, actual fraud in the numberless agreements, transactions, and dealings of mankind may, in its intrinsic nature, be reduced to two essential forms,—false representation and fraudulent concealments,—suggestio falsi and suppressio veri. The discussion of actual fraud mainly consists, therefore, in analyzing these two forms and in determining their necessary constituents."

2 Pomeroy, § 875, p. 1559.

"Constructive fraud is simply a term applied to a great variety of transactions, having little resemblance either in form or in nature, which equity regards as wrongful, to which it attributes the same or similar effects as those which follow from actual fraud, and for which it gives the same or similar relief as that granted in cases of real fraud. It covers different grades of wrong. It embraces contracts illegal, and therefore void at law as well as in equity; transactions voidable in equity because contrary to public policy; and transactions which merely raise a presumption of wrong, and throw upon the party benefited the burden of proving his innocence and the absence of fault.

"§ 923. In the great case of Chesterfield vs. Janssen, quoted in the preceding Section, Lord Hardwicke, after mentioning actual fraud, added the three other following classes: 1. That apparent

from the intrinsic nature and subject of the bargain itself; 2. That presumed from the circumstances and condition of the immediate parties to the transaction; 3. That which is an imposition on third persons not parties to the transaction."

2 Pomeroy, §§ 922 and 923, p. 1662, 1663.

"The burden of proof is on the complainant; and unless he brings evidence sufficient to overcome the natural presumption of fair dealing and honesty, a court of equity will not be justified in setting aside a contract on the ground of fraudulent representations. In order to establish a charge of this character the complainant must show by clear and decisive proof—

"First. That the defendant has made a repre-

sentation in regard to a material fact;

"Secondly. That such representation is false; "Thirdly. That such representation was no

"Thirdly. That such representation was not actually believed by the defendant, on reasonable grounds, to be true;

"Fourthly. That it was made with intent that

it should be acted on;

"Fifthly. That it was acted on by complainant

to his damage; and,

"Sixthly. That in so acting on it the complainant was ignorant of its falsity, and reasonably believed it to be true."

Southern Development Co. vs. Silva, 125 U. S., 247, 249.

"Fraud, indeed, in the sense of a court of equity properly includes all acts, omissions and concealments which involve a breach of legal or equitable duty, trust, or confidence, justly reposed and are injurious to another, or by which an undue and unconscientious advantage is taken of another."

Moore vs. Crawford, 130 U. S., 122, 128.

"The general principles applicable to cases of fraudulent representation are well settled. Fraud is never presumed; and where it is alleged the facts sustaining it must be clearly made out. The representation must be in regard to a material fact, must be false and it must be acted upon by the other party in ignorance of its falsity and with a reasonable belief that it was true. It must be the very ground on which the transaction took place, although it is not necessary that it should have been the sole cause, if it were proximate, immediate and material. If the purchaser investigates for himself and nothing is done to prevent his investigation from being as full as he chooses, he cannot say that he relied on the vendor's representations. Southern Development Company vs. Silvea, 125 U. S., 247. 'If the party to whom the representations were made,' remarked Lord Langdale, in Clapham vs. Shillito, 7 Beavan, 146, 149, 'himself resorted to the proper means of verification, before he entered into the contract, it may appear that he relied on the result of his own investigation and inquiry, and not upon the representations made to him by the other party; or if the means of investigation and verification be at hand, and the attention of the party receiving the representations be drawn to them, the circumstances of the case may be such, as to make it incumbent on a court of justice to impute to him a knowledge of the result, which, upon due inquiry, he ought to have obtained, and thus the notion of reliance

on the representations made to him may be excluded."

Farrer vs. Churchill, 135 U. S., 609, 615.

"In order to justify a recovery for fraud, it must be shown by proof that the plaintiff's agent relied upon the alleged false representations, and made them the ground and basis of his report, but that he was so circumstanced as to justify him in so relying upon and placing confidence in said representations; and if it appears that he had other knowledge, or had received other representations and statements, conflicting therewith, sufficient to raise reasonable doubts as to the correctness of such representations, then there can be no recovery on the first count."

Stewart vs. Wyoming Ranche Co., 128 U. S., 383, 387.

2. That there was a mutual mistake of the parties.

A. Because their contract should have provided for mechanical horse power developed at plaintiff's operating plant instead of electric current developed at defendant's generating plant, and

B. Because the written contract should have provided for such starting surges as plaintiff's plant (situated and equipped and circumstanced as it was) made necessary.

THERE WAS NO MISTAKE.

No mistake is shown in the complaint; and before a court of equity can grant relief, the facts relative to the mistake must be pleaded sufficiently.

"Our understanding, however, of the clearness

and certainty of allegation and proof necessary to sustain a suit for reformation of a written instrument is that it must be sufficient to satisfy the mind that the contract as written is not the contract intended by the parties, and that the error or deficiency therein is the result of a mutual mistake of law or fact on the part of the parties to such contract. Does this petition meet that requirement?"

Straus vs. Monitor Specialty Co. (Nebraska), 131 N. W., 193, 194.

"In order to accomplish this result, however, the petition must be adequate for both purposes: First, to reform the instrument; second, to obtain judgment on it."

Delaware Ins. Co. vs. Pennsylvania Ins. Co. (Georgia), 55 S. E., 330, 332.

"It follows, then, that, in order that a court of chancery may know whether the mistake complained of is such as calls for equitable interposition, it is necessary that the bill should 'state with precision the facts constituting' the mistake, and going to show whether it occurred without negligence on the part of the party complaining."

Pearson vs. Dancy, 39 So., 474, 479.

"A bill to reform and correct an erroneous settlement must be directed specifically to that end; must allege the mistakes distinctly and particularly, for the reason that 'jurisdiction for the correction of mistakes is exercised only in order that the real intention of the parties may be carried out; and if the particulars wherein there has been a failure to express correctly the intention of the parties are not pointed out, the court will have nothing to guide it in making the correction. The fact that the expression 'by mistake' is interspersed through the pleading will not be sufficient to invoke the aid of equity, where the particular circumstances constituting the mistake are not alleged."

Batson vs. Findley (West Virginia), 43 S. E., 142, 147.

There was no mistake. Where mistake is asserted, it must appear that the mistake was mutual, otherwise there would be no contract which the Court could adopt as the contract mutually intended by the parties.

"Mistake on the other hand, is internal; it is a mental condition, a conception, a conviction of the understanding,—erroneous, indeed, but none the less a conviction,—which influences the will and leads to some outward physical manifestation. Its operation is ordinarily, though not always, affirmative—the doing of some act which would not have been done in the absence of the particular conception or conviction which influenced the free action of the will. Its essential prerequisite is ignorance. It is distinguished from fraud, fraudulent representations, or fraudulent concealments by the absence of knowledge and intention, which in legal fraud are actually present, and in constructive fraud are theoretically present, as necessary elements.

"I add the two following definitions, which originally appeared in the proposed Civil Code of New York, and were thence adopted by the existing

Civil Code of California, because they embody the essential notions which I have attempted to explain and are both accurate and comprehensive: 'Mistake of fact is a mistake not caused by the neglect of a legal duty on the part of the person making the mistake, and consisting in,—I. An unconscious ignorance or forgetfulness of a fact, past or present, material to the contract; or 2. Belief in the present existence of a thing material to the contract which does not exist, or in the past existence of such a thing which has not existed.'"

2 Pomeroy, \$839, pp. 1475, 1476.

"The mistake must be mutual and common to both parties to the instrument. It must appear that both have done what neither intended. A mistake on one side may be a ground for rescinding, but not for reforming, a contract. Where the minds of the parties have not met there is no contract, and hence none to be rectified."

Hearne vs. Marine Insurance Co., 87 U. S., 488, 490.

"The jurisdiction of equity to reform written instruments, where there is a mutual mistake, or mistake on one side and fraud or inequitable conduct on the other, is undoubted."

Simmons Creek Coal Co. vs. Doran, 142 U. S., 417, 435.

"Reformation of a contract will not be granted by a court of equity unless there has been a mistake which is mutual and common to both parties to the instrument. It must appear that both have done what neither intended."

Grieb vs. Equitable Life Assurance Society, 189 Fed., 498, 501.

"The mistake which will warrant the reformation of a contract must be a mutual mistake. A court of equity may not reform a written agreement, on the ground of mistake, so as to impose on one of its parties obligations which he did not intend to assume when he made it."

New York Life vs. M'Master, 87 Fed., 63, 68; Writ of certiorari denied, 171 U. S., 687.

"It is a well-settled rule that in the absence of fraud the court cannot make any change in, nor direct the reformation, of a contract, unless the proof be clear that by reason of a mutual mistake the real intention of the parties has not been expressed (Pope vs. Hoopes, 33 C. C. A., 595, 90 Fed., 451), and that the burden of proof to show an intent contrary to that expressed in the agreement rests on the complainant (Harrison vs. Insurance Co. (C. C.), 30 Fed., 863). The mistake must have been a mutual one, and the intent which the agreement fails to express must have been the intent of both parties at the time of execution. Not only must the mistake be uncontrovertibly proved, but the party alleging it must be able to show the form to which the agreement should be brought, in order that it may be set right according to what was intended by the parties."

Fulton vs. Calwell, 110 Fed., 54, 56.

"Equity may grant relief from a mistake in a contract where there is fraud or the mistake is mutual."

Texas Cent. Ry. Co. vs. Kerns (Texas), 108 S. W., 185, 187.

"The mistake must exist in the agreement and be mutual—that is, by the mutual mistake of all the parties the instrument as written does not fulfill the manifest intention of the parties and does not

conform to the agreement as made.

"(4) It must be a mistake in omitting something which the parties intended inserting, or something which was a part of the agreement and which it was supposed was contained in the writing when it was signed and delivered. It must not be a mistake of judgment in that one party relied upon performance by the other of the provision omitted, instead of insisting upon its being reduced to writing and put in the written instrument. If the instrument is executed in conformity with the agreement as to the terms that were to be incorporated, in it, then there is no mistake, and, if it is in conformity with the intention of one of the parties, then there is no mutual mistake."

Doniphan R. Co. vs. Missouri & N. A. R. Co. (Arkansas), 149 S. W., 60, 63.

See

4 Pomeroy Equity Jurisprudence, \$1376, p. 2724.

We think this Court, upon consideration of the record, should direct a dismissal herein for want of equity.

Respectfully submitted.